

A Systematic Review of Professional Learning Community: Role of Facilitators, Factors that Facilitates or Hinders, Impact of PLC on Teachers and Students Learning and Theoretical Framework

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ABSTRACT

This is a compelling systematic literature review that aims to synthesize research on the critical role of Professional Learning Communities (PLCs) in four key areas: the facilitators' role, the factors that enable or hinder PLCs, the impact of PLCs on both teachers and students learning, and the theoretical frameworks used in PLC research. A thorough analysis of 26 articles revealed that school-based leaders have an indispensable role in supporting the development of high-functioning PLCs. Their provision of resources, guidance, and support to teachers can make all the difference. However, a lack of awareness of school culture, inadequate or unqualified PLC coaches or leaders, and restricted budgets can pose significant challenges to the success of PLCs, as highlighted by Y. K. Ting et al. (2021). On the other hand, Peng, Q., Liu, L., Zhang, L., & Yue, Y., found that PLCs offer tremendous opportunities for teachers to engage in mutual learning, share responsibility for students, and collaborate on design, implement, and improve the curriculum with the collective efforts of the group. The review also uncovered that researchers employed a range of powerful theoretical frameworks and research methods to collect and analyse data related to the research topic. With the highest frequency of qualitative studies, followed by mixed-method and quantitative studies.

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INTRODUCTION

Professional Learning Communities (PLCs) can play an important role in supporting the achievement of SDG 4 by fostering a culture of continuous learning and improvement in education systems. PLCs bring together teachers, school leaders, and other stakeholders to collaboratively engage in professional development and reflection on practice, to improve student learning outcomes (Meesuk, P., 2021). By promoting continuous learning and professional growth, PLCs can help to enhance the quality of education and increase the capacity of teachers and school leaders to provide inclusive and equitable education. PLCs can also help to bridge the gap between research and practice, by providing opportunities for teachers and school leaders to apply evidence-based practices in their classrooms and schools. In this way, PLCs can contribute to the achievement of SDG 4 by promoting quality education, closing the skills gap, and ensuring that all learners have access to the skills and knowledge they need to succeed in a rapidly changing world. By fostering a culture of continuous improvement in education systems, PLCs can help to create a brighter future for all learners and support the implementation of the Sustainable Development Goals.

According to (Brown et al, 2018) Professional learning community is defined as a group of committed educators working collaboratively in an ongoing process resulting in better student achievement. PLCs have become an increasingly popular approach to professional development, with many schools and districts around the world embracing this model.

The core principles of PLCs include a focus on learning, collaboration, continuous improvement, and results. PLCs are characterized by regular meetings, where members engage in structured inquiry and reflection on practice. These meetings provide opportunities for members to share their experiences, exchange ideas, and work together to solve problems and improve their practices. (White, C. (2019)., Soares, F., et al 2020, Vajarintarangoon, K., (2019), H. Yin et al. (2019))

PLCs have been shown to have a positive impact on student learning and teacher professional development. Research has shown that teachers and school leaders who participate in PLCs report increased job satisfaction, improved student achievement, and enhanced professional growth (Prenger, R., et al (2019))

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PURPOSE

The purpose of the systematic review is to provide an in-depth analysis of the published studies on Professional Learning Communities (PLCs) that were conducted between 2018 and 2022. The aim is to understand how PLCs have been organized in various parts of the world and to identify best practices and key insights into PLC organization. The findings of this study are important for several reasons.

Firstly, they can provide guidance to other parts of the world that have just started or are yet to start PLCs in their schools. By understanding the successes and challenges faced by other schools, these schools can develop effective PLC programs that are tailored to their specific needs and contexts.

Additionally, the findings of this study can also contribute to achieving the Sustainable Development Goal (SDG) 4 of ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all.

Finally, the results of this study can serve as a foundation for further research on PLCs in various areas of the education system. This will help to deepen our understanding of the impact of PLCs on teaching and learning and to identify areas where additional research is needed.

Four questions drive this systematic review of the Professional Learning Community (PLC):

What are the

- a) Roles of PLC facilitators/coordinators in ensuring successful PLC.
- b) factors that facilitate or hinder effective PLC session
- c) impact of PLC on teachers' and students' learning
- d) Theoretical and methodological perspectives that were prominent?

METHOD

In conducting the review, various electronic databases were utilized to search for relevant articles. These databases included the Educational Resources Information Centre (ERIC), Educational Research Complete (ERC), and Web of Science. In addition, other searches were also conducted on general internet search engines, such as Google Scholar. Articles published between 2018 and 2022 were reviewed. After a thorough assessment of the titles, abstracts, keywords, and full-text readings, 26 articles were included in the final data collection. These articles were retrieved from various regions around the world. Out of the 26 articles, three were from Africa, seven were from Asia, seven were from Europe, seven were from North America, one was from Oceania, and one was from the Middle East.

Further analysis of the data revealed that the highest number of articles came from the United States, with seven articles. The second-highest number of articles were from the Netherlands and Thailand, with three articles each. China and Sweden each had two articles, while Turkey, New Zealand, South Africa, Uganda, Zimbabwe, Taiwan, Malaysia, Finland, and Saudi Arabia had one article each.

Overall, the research was conducted using a diverse range of sources, and the resulting data provided a broad and global perspective on the topic at hand.

Roles of PLC facilitators

The study conducted in the Netherlands by Wouter Schenkeb et al. (2021) examined the function of interventions in facilitating, supporting, and enhancing teachers' professional development. The study discovered that professional learning was effectively facilitated, supported, and enhanced by interventions like coaching, peer learning, and professional development activities. The study conducted in Taiwan by Chuang, N. C., & Ting, Y. K. (2021) emphasized the importance of the PLC leader for the effective implementation of fresh knowledge from the curriculum. The study discovered that the PLC leader's assistance, direction, and resources to instructors were crucial to the teacher's ability to successfully incorporate new curriculum-related information. Ismail, K., et al (2022) mentioned that school leaders need to provide professional support for teachers' collaboration and develop human capital. They also mentioned that school leaders need to support teachers' learning and develop their competency. Furthermore, they mentioned that school leaders need to create a collaborative learning environment and collective behaviour, as well as promote continuous collaboration and innovation culture. The coordinators or facilitators are in charge of assisting school leaders in their efforts to learn and grow, according to Alkrdem, M. (2020). They also emphasized the necessity for coordinators or facilitators to inspire all of the employees and other interested parties to collaborate on the development of the school's mission to achieve major improvements. They also talked about the necessity for coordinators or facilitators to recognize and implement educational goals, motivate teams to participate in group decision- making, and seek out practical solutions.

The study by Vajarintarangoon, K. et al. (2019) in Thailand covered the significance of school administrators' skills in the creation of PLCs. In small groups of PLCs, the research indicated that the PDCA model combined with contemplative instruction was successful in fostering school administrators' competencies. The study conducted in the USA by Hamada Elfarargy et al. (2022) explored the function of collaborative leadership techniques in the growth of PLCs. The study discovered that involvement in a

A Systematic Review of Professional Learning Community: Role of Facilitators, Factors That Facilitates or Hinders, Impact of PLC on Teachers and Students Learning and Theoretical Framework

professional learning community caused principals to change their perspectives on collaborative leadership practices and resulted in reported changes to their leadership philosophies. The research by Thessin, R. A. (2021) in the USA discussed the role of school-based leaders in supporting the development of high-functioning PLCs. The research found that school-based leaders play an important role in supporting the development of high-functioning PLCs by providing resources, guidance, and support to teachers. The study by Prenger, R., et al. (2019) in the Netherlands also covered the facilitator's role in encouraging and evaluating PLC development. The study discovered that by offering advice, assistance, and resources to instructors, facilitators nurture and evaluate PLC development.

Factors that facilitate or hinder effective PLC

In the section titled "Importance of Shared Leadership in the Professional Learning Communities," Alkrdem, M. (2020), explored the elements that either help or impede the formation of professional learning communities. They identified both internal and external factors, such as the type of school leadership, organizational structure, staff participation, high- quality training, and the internal learning environment within the school, that have an impact on the transformation of schools into professional learning communities. They also examined the outside aspects, such as altering the school's traditional image, adjusting to technology advancements, caring for the professionalism of the teachers, creating a national board to guarantee learning quality, and energizing the role of civil community organizations. Cansoy & Parlar (2018) explored the elements that help or impede PLC. They contend that key components of successful professional learning communities include shared and supportive leadership, shared values and a common vision, group learning and application, enabling environments, and shared personal practice. Additionally, they advise school administrators to prioritize student and teacher learning, foster a climate of cooperation and professional growth, track and assess outcomes, and assure teacher cooperation to enhance student learning. Y. K. Ting, et al (2021) talked about the things that help or hurt PLC. They highlighted that PLC performance can be hampered by a lack of awareness of the school culture, inadequate or unqualified PLC coaches or leaders, and restricted budgets. A mature level of PLCs was also highlighted, along with the significance of instructors' free will and healthy psychological states. According to Johannesson, P. (2022), collaborations within the teachers' comfort zones and reduced learning opportunities as a result can impede the development of PLCs. Johannesson also suggested that spending too much time scientifically reflecting on and analyzing practice might distract from engagement in lesson planning or teaching. The study conducted in the Netherlands by Wouter Schenkeb et al. (2021) examined the function of interventions in facilitating, supporting, and enhancing teachers' professional development. The study discovered that professional learning was effectively facilitated, supported, and enhanced by interventions like coaching, peer learning, and professional development activities. Thesis, R. A. (2021) explored the variables that support or obstruct PLC development and emphasized that for professional learning communities to flourish, administrative supports such as "time to meet, money to support new curricula, and training" are necessary. They also talked about how school-based leaders can help PLCs by providing the appropriate resources and how these resources may help students do better academically. PLCs in kindergartens are thought to be influenced by teachers' perceived trust in their co-workers, the principal, and the parents, according to Yin, H., et al 2019. Additionally, they mention how the size of the school and external professional development programs, accountability demands, and PLC establishment and growth can all have an impact. The study conducted in Thailand by Vajarintaragoon, K. et al (2019) also examined the elements that contribute to the project's success and sustainability. According to the study, context had an impact on impact, success, problems, and sustainability. It lessened the issue while boosting sustainability. In a PLC, there is a shared vision, shared set of duties, shared emphasis on student learning, and shared emphasis on ongoing professional development for teachers.

Impact of PLC on teachers and students' learning

M. Chauraya, ad K. Brodie (2018) stated professional learning community gave teachers the chance to enhance their understanding of mathematics and the curriculum, as well as to build new understandings of learners' mistakes and the crucial idea of ratio. They added that the discussions offered chances to learn how to recognize students' learning needs and, consequently, teachers' own learning needs. R. Cansoy, H. Parlar (2018). It has been asserted that strategies that improve education, classroom management, and student learning are connected to teacher professionalism. They claimed that professional learning communities (PLCs) can assist teachers in expanding their professional know-how and collaborating to boost students' academic performance. Additionally, they said that PLCs can foster a culture of cooperation and growth and can aid in bridging the gaps between kids from socioeconomically disadvantaged backgrounds. The authors Peng, Q., Liu, L., Zhang, L., & Yue, Y. found that PLCs create opportunities for teachers to engage in mutual learning. This enables teachers to share the responsibility for students and collaborate on designing, implementing, and improving curriculum with the collective efforts of the group. Through social interaction, teachers can develop the best strategies for teaching. Moreover, according to previous research, participating in PLCs can help teachers develop both their subject knowledge and pedagogical

A Systematic Review of Professional Learning Community: Role of Facilitators, Factors That Facilitates or Hinders, Impact of PLC on Teachers and Students Learning and Theoretical Framework

content knowledge. As a result, this can positively impact student learning outcomes. (White, C. 2019, Fred, H., Meeuwen Pierre, V., Ellen, R., & Marjan, V. 2020). When teachers engage in professional learning communities, they are exposed to a wide range of perspectives, resources, and feedback from their peers. This can help them gain a deeper understanding of their subject matter and teaching methods, which ultimately improves their teaching practices and enhances student learning.

THEORETICAL FRAMEWORK

Theoretical frameworks serve as the filters through which researchers interpret their data and offer the underlying assumptions and hypotheses that guide the development of their research topics, methodologies, and analyses. They support the selection of the best research methodologies, aid in the organization of thoughts and ideas, and offer a framework for the interpretation and analysis of data. Professional learning, social practice, professional learning communities (PLCs), Hord's five dimensions of the professional learning community, interpretative approach, case studies, organizational theory literature, academic optimism, organizational learning research, CIPP (IEST) evaluation model, and frameworks proposed by Hord and DuFour, DuFour, and Eaker were just a few of the theoretical frameworks used in the studies reviewed. The researchers looked at the results of teacher professional learning using several theoretical frameworks. For instance, Prenger et al. (2019) used professional learning, networked PLCs, and mixed-methods research as the theoretical perspectives to investigate the effects of PLCs on teacher professional learning outcomes. Worapun et al. (2022) used a blend of constructivist and social constructivist viewpoints to guide their analyses and selected Hord's five dimensions of the professional learning community (PLC) as their theoretical framework for the study. The framework for Yin et al. (2019)'s study was based on the theoretical views of faculty trust and professional learning communities (PLCs). Other theoretical frameworks used by the researchers included social practice theory, CIPP (IEST) evaluation model, interpretative approach, organizational theory, academic optimism, project-based learning, and K-12 partnership, among others. Each framework provided a unique lens through which to view and understand teacher professional learning outcomes, and each had its own set of underlying concepts and theories. A variety of research methods were employed to collect and analyse data related to the research topic. The methods included a case study with convenient sampling, an interpretive case study, qualitative research, group interviews, interviews, a correlational model, quantitative studies, qualitative case studies, positivism, and qualitative research. The inventory item with the highest frequency is qualitative, followed by mixed method and quantitative studies. See table attached

DISCUSSION AND CONCLUSION

The writers talked about how facilitators help PLCs function effectively. They emphasized the significance of school-based leaders in developing a learning- and collaboration-focused school culture, delivering school-based professional learning, and conveying expectations for PLC work. They also talked about how distributed leadership is essential for the growth of PLCs that work well. They also pointed out that the facilitator played a crucial role in the learning opportunities offered in the community because of their capacity to start conversations that pushed teachers to reach new levels of understanding or thinking, to direct the conversation's focus, and to impart knowledge when required. Finally, they recommended that school administrators develop settings where they can share leadership and encourage teamwork. (Alkrdem, M. 2020). The authors talked about how PLCs can improve teacher effectiveness and student results. They discovered that PLCs can boost teacher cooperation, instructor effectiveness, and student accomplishment. PLCs can also contribute to the development of a culture of respect and trust, which can enhance student performance. PLCs can also give teachers the chance to share information and skills and advance their education. Vajarintarangoon, K. et al (2019). They can also contribute to the development of a climate that motivates educators to keep up with the most recent studies in the area of teaching and learning. Additionally, PLCs can offer interactive teaching techniques that improve the cooperative nature of teaching and learning.

LIMITATION

Studies about generic PLC were not included because this study has a specific focus on professional learning communities (PLC). This research may not be exhaustive because it only examined articles taken from a few research databases and because there isn't a lot of research on PLC in Africa that is well-represented in international research databases.

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